ER Site No. 60: Bunker Area (north of Pendulum Site)

ADS: 1333
Operable Unit: Canyons Test Area

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Site History

The Bunker Area Site is located north of the Pendulum Site (ER Site 59) and east of Manzano Base, approximately 1.4 miles north on Pendulum Road from the intersection with Coyote Springs Road. The site is located immediately adjacent to an arroyo that flows into Arroyo del Coyote. The site is co-located with ER Site 10. The Bunker Area Site included two bunker buildings. The terrain is relatively flat, gradually sloping to the west towards the arroyo.

Two bunkers were located side by side at the site, constructed into the east bank of the arroyo. The bunker located to the north was constructed of railroad ties (wood) and its roof was covered with earth. The other bunker was located ~15 feet to the south and had 3 concrete walls remaining intact. The corrugated steel roof was located adjacent to the bunker as a result of explosive testing. The remaining concrete walls of this bunker were approximately 25-feet deep by 10-feet wide by 8-feet high and opened to the west (towards the arroyo). The bunkers were originally constructed as control buildings for the Pendulum Site.

Historic activities at the site include weapons tests, some of which involved depleted uranium, beryllium, high explosives, radioactive tracers (osmium and others). Although large scraps of material and debris piles were removed during cleanup following the testing, some debris was incorporated into soil mounds in the area (ER Site 10) or left on the surface. The last weapons test resulted in an explosion that blew off the corrugated metal roof of the concrete bunker. Based on eye witness accounts, the blast radius was approximately 1,000 feet. The roof was displaced approximately 10 feet to the south of the bunker. The other bunker was basically intact. Depleted uranium was found to be embedded in the remaining concrete walls and metal roof.

The site occurs in a valley between bedrock-cored ridges/mountains to the east and west. The shallow subsurface geology is comprised of a thin layer of alluvial sediments overlying granitic

and metamorphic bedrock. This area of SNL is characterized by considerable structural complexity in the subsurface. Several major fault systems with different orientations and offsets intersect the general area.

Depth to ground water is unknown and may vary across the site because of complex geology. The water table most likely occurs in fractured bedrock.

Constituents of Concern

DU
Metals (Be)

Current Hazards

There are no current hazards at this site related to contamination of the surface or subsurface soils. All structures have been removed from the site.

Current Status of Work

Operable Unit 1333 RFI Work Plan was submitted to EPA for approval in January 1996, but the work plan did not discuss ER Site 60 in detail due to the VCM necessary at the site.

A Phase I surface radiation VCM was completed in March 1995 to remove DU from the surrounding soil piles (ER Site 10).

A Voluntary Corrective Action to remove the bunkers and debris was completed in 1999. All radioactive material was removed and properly disposed of and the site was restored to natural grade.

The site was proposed for a risk-based NFA in September 2000. This site was accepted for No Further Action by NMED on December 5, 2000. The NFA was approved by NMED on November 19, 2001, after completing the public review and permit modification process.

Future Work Planned

None

Waste Volume Estimated/Generated

Approximately 40 cubic yards of low level radioactive waste was disposed of, approximately 50 cubic yards of clean concrete was provided to KAFB for beneficial reuse, and approximately 10 yards of clean scrap metal was recycled.

Information for ER Site 60 was last updated Jan 22, 2003.